

**ABSTRACT OF THE DISCLOSURE**

The present invention relates to a keratinocyte growth factor fragment, KGF<sub>des1-23</sub>, or an analog thereof that is composed of a portion of an amino acid sequence of mature, full length keratinocyte growth factor, KGF<sub>163</sub>. The fragment exhibits at least a 2-  
5 fold increase in mitogenic activity as compared to a mature, recombinant keratinocyte growth factor, rKGF, but lacks a sequence comprising the first 23 amino acid residues, C-N-D-M-T-P-E-Q-M-A-T-N-V-N-C-S-S-P-E-R-H-T-R- (SEQ ID NO: 2) of the KGF<sub>163</sub> N-terminus. The present invention also relates to a DNA molecule encoding KGF<sub>des1-23</sub>, an  
expression vector and a transformed host containing the DNA molecule, and a method of  
10 producing KGF<sub>des1-23</sub> by culturing the transformed host. The present invention further relates to a conjugate of KGF<sub>des1-23</sub> and a toxin molecule, and the use thereof for treatment of hyperproliferative disease of the epidermis. Moreover, the present invention relates to a therapeutic composition containing KGF<sub>des1-23</sub> and a pharmaceutically acceptable carrier and the use thereof for wound healing purposes.